

Air Force Research Laboratory AFRL

Science and Technology for Tomorrow's Air and Space Force

Success Story

EDUCATION PARTNERSHIP ENRICHES CHEMISTRY AND PHYSICS INSTRUCTION AT ANTELOPE VALLEY COLLEGE



The Antelope Valley Career Prep Council's School to Careers consortium presented the Propulsion Directorate with an annual award in recognition of the directorate's more than 13 years of educational outreach efforts in the Southern California area. The directorate continues to expand its outreach efforts assisting educational facilities, instructors, and students with modern equipment and educational opportunities. For more than 55 years, the men and women of the directorate's Edwards Research Site have provided the nation with the rocket propulsion technology research, development, and testing needed to access space and defend the country.



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Accomplishment

The directorate signed Educational Partnership Agreements (EPA) with several high school districts and college/university partnerships in the Southern California area, enabling its partners to obtain laboratory equipment to enhance their chemistry and physics educational capabilities. The directorate entered into an EPA with the Antelope Valley College, located in Lancaster, California, and loaned automated scientific laboratory equipment to its physics and chemistry classes. The EPA also provides opportunities for teaching assistance, involves students in directorate research projects, and furthers equipment support including items needed for materials engineering laboratories.

Similar efforts are under way with recent EPA agreements with the Mojave and Antelope Valley Union High School districts. The EPAs will provide classroom equipment and pathways for students to enrich their education in the sciences. Currently, almost every high school chemistry and physics class in the Antelope Valley will be enriched by nearly \$120,000 worth of equipment and materials from the directorate.

One of the most significant changes in the region is the recent announcement of a 4-year engineering degree program at the Lancaster University Center, a partnership of the Antelope Valley College, California State University-Bakersfield, California State University-Fresno, and the City of Lancaster. As a consortium member, the directorate will support a full-time mechanical engineering professor and the laboratory equipment for 3 years.

Background

The nation's defense establishment is facing a severe shortage of scientists and engineers during the next decade as a large percentage of the existing workforce reaches retirement age. The directorate is doing its part by developing programs that will attract more students into the scientific and engineering career fields. The directorate not only supports numerous career days, science fairs, and laboratory tours for schools, but also participates in the Antelope Valley's Math, Science, and Engineering Technology consortium; Career Prep Council-School to Careers; and the Kern Science Foundation.

Propulsion Technology Transfer

Additional information

To receive more information about this or other activities in the Air Force Research Laboratory, contact TECH CONNECT, AFRL/XPTC, (800) 203-6451 and you will be directed to the appropriate laboratory expert. (04-PR-16)